

A story to think about... (part 1)

Ventricular premature beats and mortality after myocardial infarction

W Ruberman, E Weinblatt, JD Goldberg, CW Frank, and S Shapiro

To assess the role of ventricular premature beats in influencing mortality of coronary patients....

The corresponding risk of death from any cause is twice that of men without such complex beats in the hour. These arrhythmias make an independent contribution to increased risk of death that persists over the length of this observation period.

NEJM 1977;297:750-757

A story to think about... (part 2)

Mortality and morbidity in patients receiving encainide, flecainide, or placebo. The Cardiac Arrhythmia Suppression Trial

DS Echt, PR Liebson, LB Mitchell et al.

CONCLUSIONS. There was an excess of deaths due to arrhythmia and deaths due to shock after acute recurrent myocardial infarction in patients treated with encainide or flecainide. Nonlethal events, however, were equally distributed between the active-drug and placebo groups. The mechanisms underlying the excess mortality during treatment with encainide or flecainide remain unknown

NEJM 1991;324:781-788

NEJM 1977;297:750-757

**Approach inspired by
the interpretation of
pathophysiology and
mechanisms**

**Approach inspired by
the logic of clinical
relevance**

NEJM 1991;324:781-788

What is EBM?

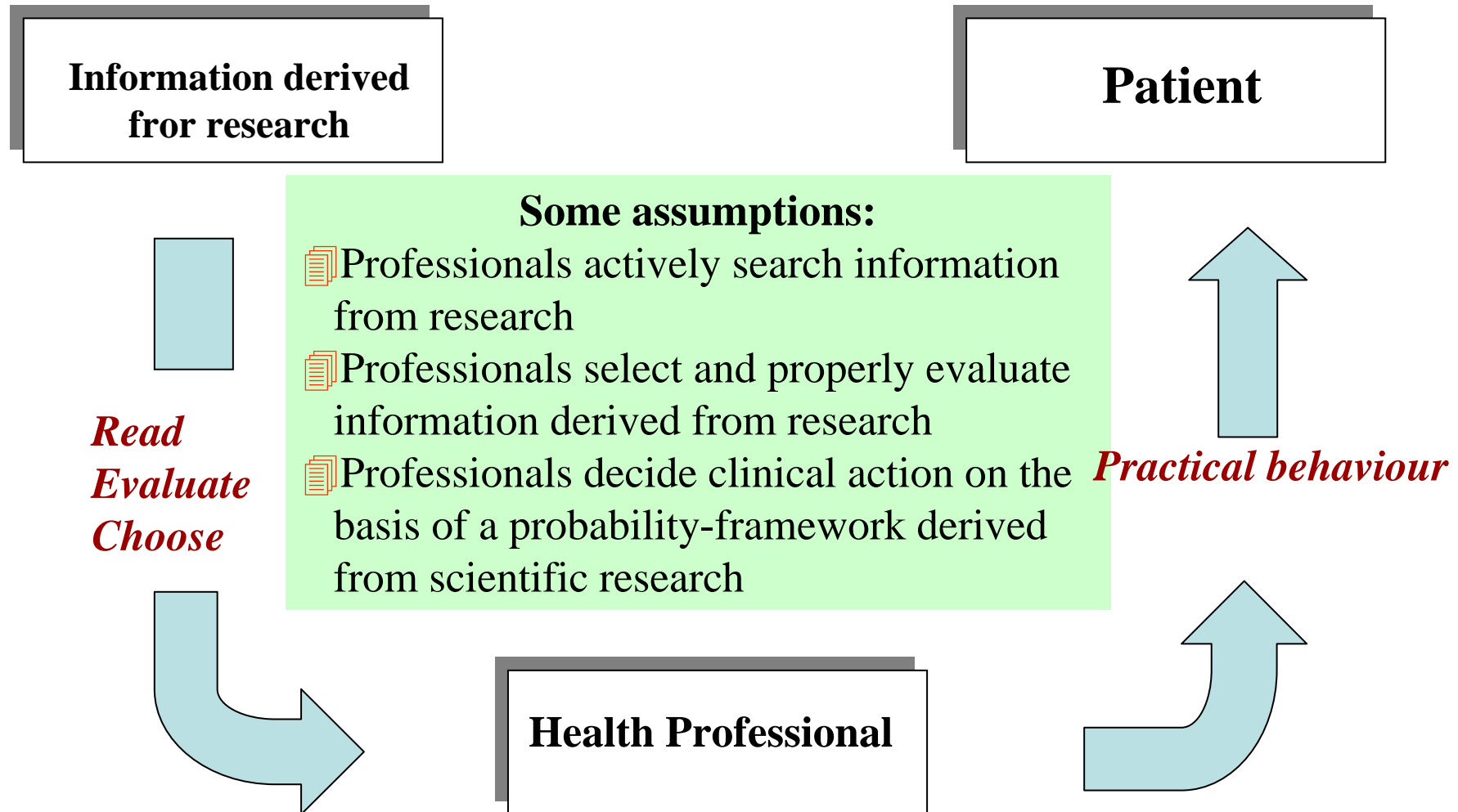
EBM has been defined by D. Sackett as the “the conscientious, explicit and judicious use of current best scientific evidence in making decisions about the care of individual patients”.....

Think!

The evidence –based approach implies both a scientific “corpus” and a professional practice. EBM is, in fact, a way of knowledge production and coincidentally a clinical methodology, that is a way of using knowledge in the everyday clinical practice.

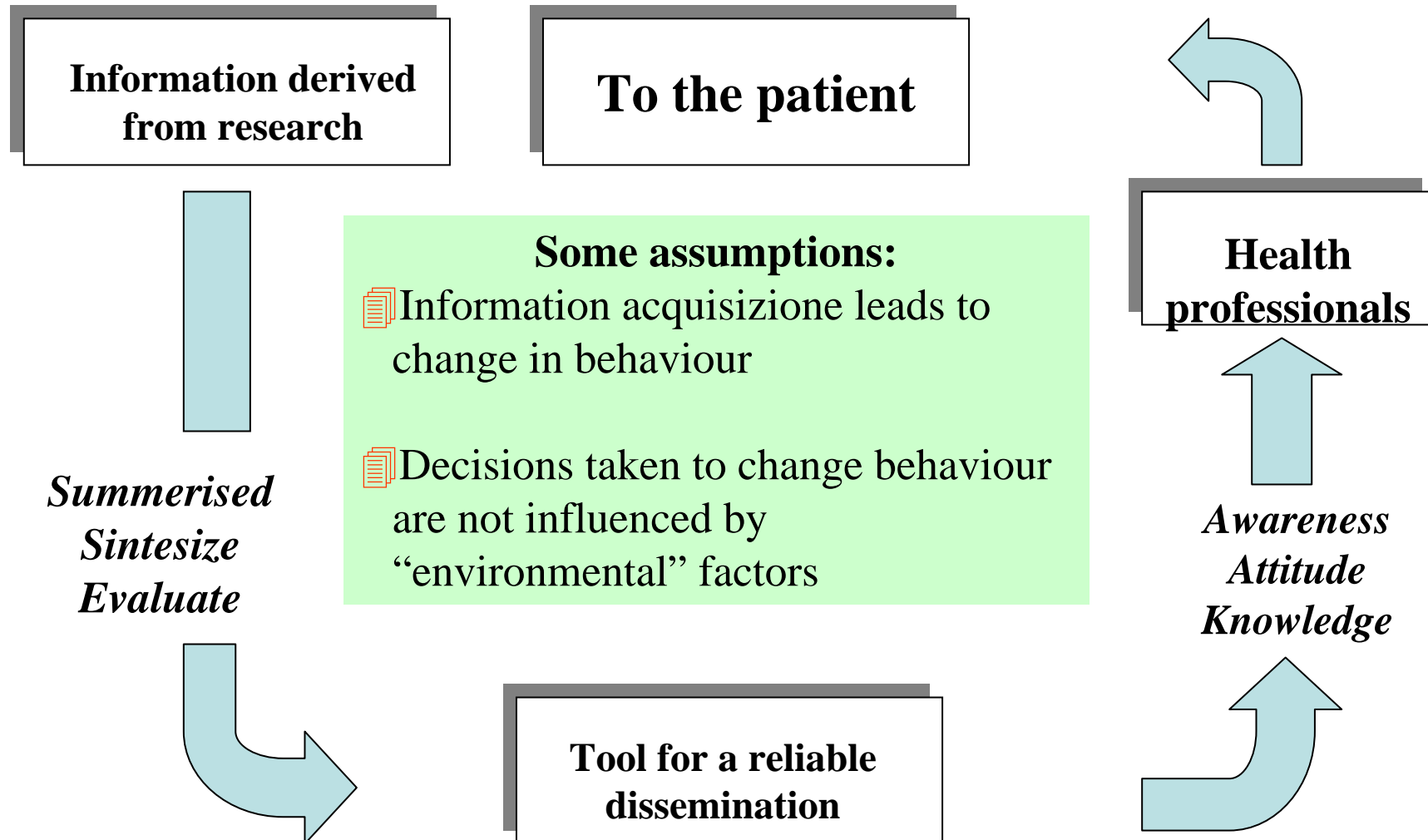
Dissemination of scientific information and change in practice: a simplistic model

“How we would like it”



Revision of the simplistic model reflecting the “real world” of professional information

“The case for guidelines”



What is EBM?

A more pragmatic definition of EBM is that it is a *gathering of instruments and resources* useful to identify and apply the best evidence in professionals' activity.

Therefore, the EBM paradigm must not be to request to single professionals that they should read all the primary relevant literature; rather they have to learn and read critically information pre-evaluated; they should know how to judge if the latter are useful and relevant to solve the problem they want to solve.

Systematic reviews and clinical decisions

Systematic reviews allow to analyse:

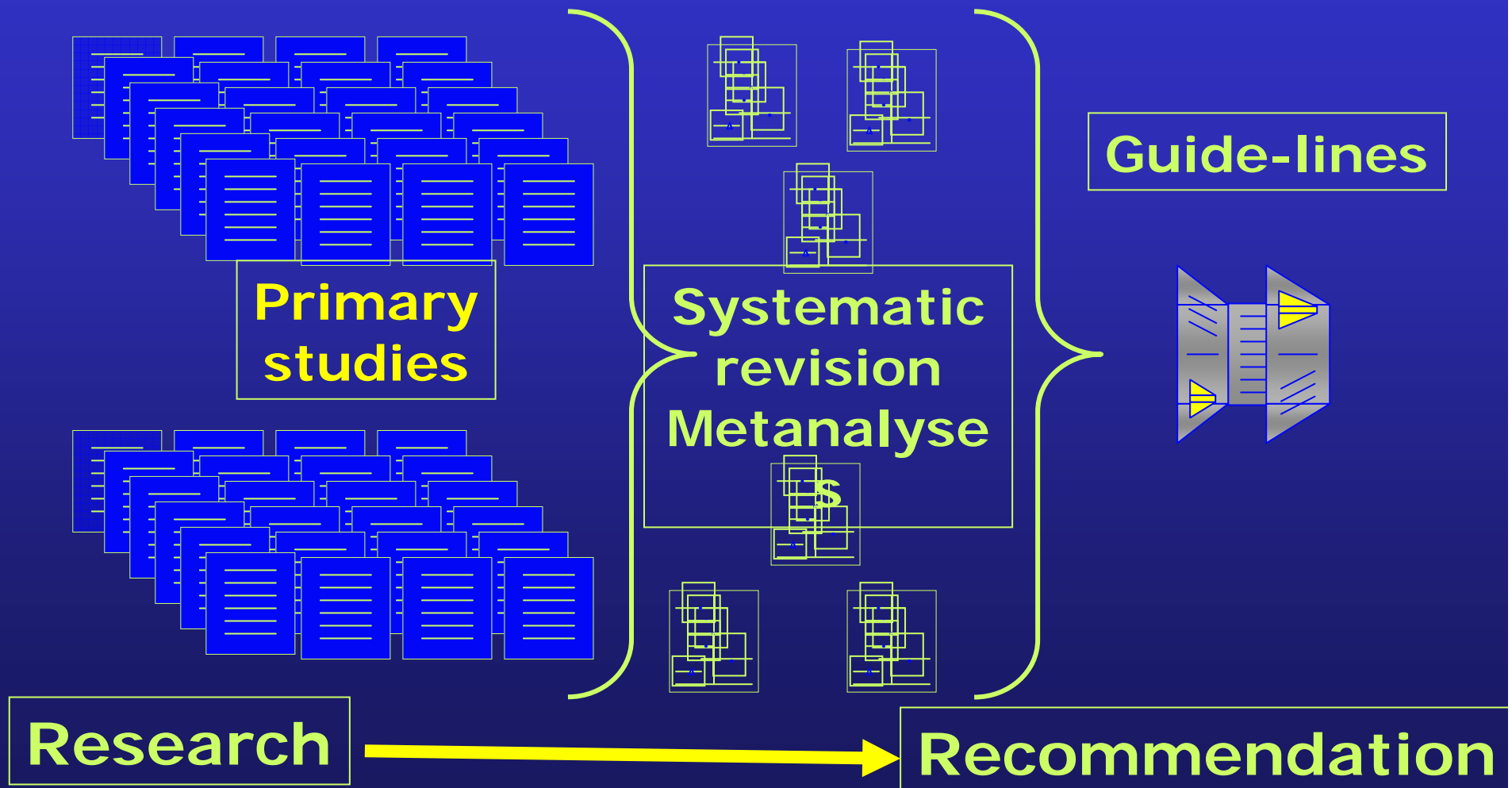
☆ quality

🕒 clinical relevance

🕒 coherence / heterogeneity

} of the
available
scientific
evidence

How recommendations are generated



A change of paradigm accompanying the ascending success of EBM

- . “Quantitative” approach
- . Crystal-clear decision process
- . Professional standards
(qualification and accountability)
- . Patient-centered health care
- . Ethics

Inherent difficulty is claimed for clinical settings where communication is the basis for efficacy. Question is: discipline features or refractariety to apply new methodologies in investigations?

Home treatment for mental health problems: a systematic review.

Psychol Med. 2002 Apr; 32(3): 383-401.

“A centrally coordinated research strategy is recommended, with attention to study design. Experimental and control service components should be prospectively recorded and reported to enable meaningful analysis.”

Home treatment for mental health problems: a systematic review

Health Technol Assess. 2001; 5(15): 1-139

“A centrally coordinated research strategy, with attention to study design, is recommended.”

Words, as they are, do not constitute the language for communication; rather it is the way to have them together which determines the communication

EBM

**Outcome
research**

EBHC

Clinical governance

What is EBM?

EBM is an approach to build and critically analyse knowledge in medicine which should benefit:

Health professional decision

Patients' choice

Administrators taking into account

about the best information in order to receiving or rejecting it in a way characterised by awareness and motivation. In other words EBM is the necessary – but not sufficient - condition to express an

INFORMED DISSENT

Alessandro Liberati, 1999